CHAPTER 5

PURPOSE AND NEED FOR ACTION

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5. PURPOSE OF AND NEED FOR ACTION

5-1 OVERVIEW

The contents for the "Purpose of and Need for Action" section are outlined in the FHWA Technical Advisory T6640.8A. The title "Purpose of and Need for Action", is applicable to an Environmental Impact Statement (EIS) only; however, a section similar to this is contained in an Environmental Assessment (AS) and the Preliminary Engineering Report (PER). The EA counterpart is entitled "Need", and in the PER the title is "Need for Improvement." The information found in sections is the same, and for the rest of this chapter they will be described as the "Need" section.

The Need section must clearly establish the need for the proposed improvement and provide the rationale for how the project addresses the problems, issues, and concerns identified in this section. This section of the reports must outline and discuss any established community goals and objectives which pertain to the project. This section serves as the foundation for the proposed project and provides the principle information upon which the "No-Build" alternative discussion is based. It is in this section that the rationale for pursuing the action is clearly established, and the fact that the actions proposed are consistent with local transportation planning (Cost-Feasible Plan), local comprehensive planning, land use planning, and growth management efforts.

This section is often neglected regarding the amount and quality of documentation justifying the reason for the proposed project. It should be one of the strongest parts of the document, since the project concepts which are proposed in subsequent sections of the EIS, EA, or PER are developed to address community, social, and economic needs related to transportation. Transportation is, therefore, a part of the overall solution to community problems. Failure to establish a sound "Need" section severely weakens the engineering and environmental documents as decision-making documents and reduces the credibility of the alternatives proposed within the text. The rationale for developing a project must be well established in this section.

5-2 PROCEDURE

The following discussion describes the types of information and data generally found in the "Need" section. This section of the document should be developed using the areas of consideration identified in this chapter to establish the need for the project. Several of these areas may support the need for the project and should be included as appropriate.

There are often multiple deficiencies or desires that establish the project need, and therefore, often multiple needs. These needs can be separated into two categories: Area Wide Needs, and Project Corridor Needs. Area wide needs relate to system deficiencies and local government or community desires. Project corridor needs relate to route deficiencies

and specific community desires within the corridor. These needs are explained in more detail in the subsequent sections of this chapter.

When identifying all needs for a project there will be times when those needs may be in conflict. For example, the need to provide additional capacity to increase the level of service may be in conflict with an identified need for a more livable community. Alternatives should be evaluated that address all identified needs which may result in a range of alternatives, with some of those alternatives addressing specific needs. These needs and the alternatives to address these needs will then be evaluated throughout the project development and environment process.

5-2.1 Area Wide Needs

Many of the needs associated with an individual project can be traced to area wide needs. These needs may be addressed in the documents associated with a Local Government Comprehensive Plan or Cost Feasible Plan from a Metropolitan Planning Organization (MPO). While not always addressed in these planning documents, this information can be obtained through meetings with the local government, business communities, and the public. The following are some of the types of needs that may represent the needs of the community.

5-2.1.1 System Linkage

The need for system linkage should discuss how the proposed project fits into the existing and future transportation system (network). The contribution of the proposed action to developing a fully integrated multi-modal transportation network must be discussed in relation to existing roadways and proposed improvements contained within the Department's Five Year Work Program and other local government transportation projects, which could be affected by or would affect the proposed action. If the proposed action is a "connecting link" between major points in the transportation network, a discussion must be included on how the improvement will address the essential needs of the system and the community, as a whole.

5-2.1.2 Transportation Demand

The need to satisfy transportation demand should be based on the relationship of the project to the local transportation plan (Cost-Feasible Plan) and the Local Government Comprehensive Plan. The action proposed by the Department should be acceptable to the County Commission for rural areas, or the MPO for urban areas. The proposed action should be consistent with the local Cost-Feasible Plan for Transportation and the Local Government Comprehensive Plan to the maximum extent feasible before the project can be developed by the Department. Documentation of consistency with the Cost-Feasible Plan and the Local Government Comprehensive Plan is to be provided by the District Planning Office and included in the project file. Documentation that a project is acceptable to the County Commission or MPO should be provided in the EIS, or EA by including a letter from the respective governing body in the Appendix.

It is the purpose of this section to document that the project, as conceived, is being developed with local input and is consistent with local goal-attainment policies. If, over the course of the study, there should arise a change in the environmental setting of the project which affects the traffic projections and requires modification of the proposed project concept from that originally proposed, (i.e., increased laneage) then the local plans must be modified to reflect this change in roadway concept prior to any requests for federal authorization of the project. The reverse of this also holds true.

It is worth noting here that projects in areas designated "non-attainment" or "maintenance" for air quality will not receive Location and Design Concept Acceptance (LDCA) from the FHWA if they are not in conformity and consistent with the local Cost-Feasible Plan and Program. Projects must be consistent with the transportation element of the Local Government Comprehensive Plan regardless of funding, prior to the approval of the environmental document.

5-2.1.3 Federal, State, or Local Government Authority

The need to respond to federal, state, or local government desires or requirements should be documented with a brief history of those governmental units' support of the proposed action. All correspondence (letters and resolutions) and minutes of meetings, etc., which exist, should be discussed and referenced (letters and resolutions should be appended to the document). If detailed discussion of local meetings is provided in the Comments and Coordination section of the environmental document then the issues raised and the results of these meetings should be mentioned in the "Need" section, and the reader referred to the more detailed discussion in the Comments and Coordination section.

5-2.1.4 Social Demands or Economic Development

This section discusses the types of social and economic traffic generators, both existing and future, which exert travel demands on the proposed facility. This includes businesses, neighborhoods, land use plans (existing and future), recreational facilities, shopping centers, new developments (economically-oriented or residentially-based), and any other type of social or economic anomaly which could increase travel demands on the proposed facility and, as a consequence, increase capacity demands and safety demands. A map should be provided of the project areas which identifies these generators in relation to the proposed project. A listing of existing and future development in the corridor should also be provided to increase reader understanding of community growth potential. This is especially crucial on projects involving roadway improvements to a barrier island. The need for such a project must be demonstrated as described in Part 2, Chapter 26.

5-2.1.5 Modal Interrelationships

The need to respond for different types of transportation modes which interface with the proposed project and establish how the proposed action will complement these modes (i.e., airports, rail port facilities, mass transit services, ridesharing, special use and high occupancy vehicle (HOV) lanes, etc.) must be evaluated. The relationship of the project to the success of these alternate modes must also be shown. This evaluation must provide a sound background and understanding of the different types of transportation modes functioning in the corridor, how they operate today, and will operate in the future.

A project that lies in an area that is in non-attainment for air quality needs to have been part of the MPO's congestion management system (CMS). The CMS should have evaluated travel demand reduction and transportation systems management strategies prior to developing single occupancy vehicle (SOV) capacity improvements. The "Need" section of the engineering and environmental documents should summarize those strategies identified in the CMS plan.

Discussion must also include how bicyclists will be accommodated along the corridor and identify if the County or City has a Bicycle Plan or Bicycle Element in their comprehensive plan. Consideration of the bicycle plan must be demonstrated in the Pedestrian and Bicyclist section of the document and referenced in this section of the text. If there exists some discrepancy between the plan and the proposed action then this discrepancy must be discussed with local government officials.

5-2.2 Project Corridor Needs

In addition to the area wide needs, projects may have specific corridor needs. A review of Department data bases, as well as specialized analysis, may be required to determine the deficiencies associated with the corridor. Below is a listing of the type of corridor needs that may be associated with the project.

5-2.2.1 Capacity

The capacity of the existing facility, its present level of service, and any deficiencies of the system in serving the motoring public needs to be evaluated. Existing interim and future traffic data (20-year design traffic) are provided for the entire corridor and major intersecting streets. This is usually the result of project forecasting in accordance with the Department's Design Traffic Procedure. The results of this report are typically shown on strip maps and discussed in the text. Discussion is included on future level of service of the facility once the improvement, as proposed, is complete and on how this action will affect traffic capacity throughout the network. Also, a statement should be included addressing how traffic data was derived.

Level of Service (LOS) standards have been developed by the Florida Department of Transportation for the Interstate and other Florida Intrastate Highway System (FIHS) facilities. Local governments have developed LOS Standards for non-FIHS facilities and local roads. If a facility is proposed for improvement, it must be demonstrated that the resultant level of service is equal to or better than the accepted standard for that facility. If this is not the case then this aspect of the project must be discussed with the Federal Highway Administration (FHWA) Transportation Engineer prior to proceedings with the project. Likewise, it must then be demonstrated that to improve the facility to the LOS standard, or better would not be feasible. FHWA coordination with the Department regarding an action which will give temporary relief, but no long-term benefit to the capacity or level of service of the facility, must be undertaken before the project can be developed further.

For FIHS facilities, failure to achieve the LOS standard will require the District to coordinate with elected officials, the public, and business officials. This coordination should include the evaluation of developments which could include access management, development of local "reliever" roads, and internal connectivity/circulation.

A brief explanation of LOS "A" through "F", as provided in the Highway Capacity Manual, should also be included to assist the reader in understanding the rating.

Alternatives should be developed to address the existing and future problems as set out in this section of the PER and environmental document. Where the need is capacity and level of service, the proposed alternatives must seek to improve the traffic dilemma. If this is not economically feasible then this must be demonstrated in the Alternatives section of the document (Part 2, Chapter 6).

5-2.2.2 Safety

An evaluation on crashes which have occurred in the study area may indicate a need for improvement. This evaluation should include a discussion on types, frequency, percentage increase or decrease over a period of time, and the rate of crashes when compared with the statewide average for similar facilities. The use of a table to illustrate this data is suggested. The discussion must also include the identification of existing high-hazard sections of the facility and how the proposed improvement will solve the identified traffic safety problem. This discussion must also demonstrate why localized treatment of the problem will not provide a permanent solution.

Any traffic or transportation safety issues which are or could become a problem (i.e., toxic material transportation) should also be discussed to the appropriate level of detail required.

5-2.2.3 Structural Sufficiency

This is an optional discussion in the "Need Section" section is only provided whenever there is a bridge structure involved on a project. The need and rationale behind reconstructing or replacing the existing bridge must be provided. This entails providing a detailed description of the existing structure(s) and their deficiencies. The deficiencies identified may be the result of evaluating the following data:

1. Structural and functional ratings;
2. Capacity
3. Level of Service;
4. Horizontal and vertical clearances;
5. State of repair;
6. Weight restrictions or limitations;
7. Maintenance record;
8. Maintenance schedule;
9. Maintenance cost;
10. Costs to retrofit or reconstruct;
11. Community concerns and governmental interest.

In addition to the above, if the bridge structure(s) involved is (are) over navigable waterways, the following information must also be provided to determine if the bridge(s) satisfies U.S. Coast Guard navigational data requirements:

1. A description of the navigational clearances(s) provided by the existing bridge(s);
2. A description of waterway characteristics at the bridge sites, including width, depth, and currents;
3. A description of the type, size, and number of vessels using the waterway, and the number of bridge openings required to serve waterborne traffic.
4. A description of any bridge-related, boating accidents.
5. A description of any waterway-related businesses in the vicinity of the project and,

6. A description of the potential impacts of the project on navigation including effects during the construction period.

This section should also state whether or not the U.S. Coast Guard is a cooperating agency on this project and should reference any correspondence from them.

5-3 PLANNING REPORTS

Much of the information required for the Needs section of the engineering and environmental document may be included in previously prepared planning reports. Master Plans, Action Plans, and Corridor Designation Reports, among others, may contain the information that was referred to earlier in this chapter. The information contained in the planning reports should be evaluated and updated prior to being incorporated into the engineering and environmental reports.

In additional to the above mentioned planning reports there are several management systems that were required by FHWA and are now required by state statue. Needs for the project might stem from one or more of these systems. When developing the needs statement for the project the following systems should be considered:

Pavement Management System – This process systematically provides, analyzes, and summarizes pavement information for use in selecting and implementing cost-effective pavement construction, rehabilitation and maintenance programs.

Bridge Management System – This system's purpose is to manage and preserve the statewide bridge network and provide safe and efficient transportation to the traveling public.

Safety Management System – This system's purpose is to provide the safest roadway system possible through the combined efforts of engineering, enforcement, emergency services, and education.

Public Transportation Management System – This system's purpose is to help ensure that transit vehicles, facilities, and equipment are maintained in a serviceable condition.

Congestion Management System – This system's purpose is to improve the mobility of people and goods throughout the state.

Intermodal Management System – This system has been replaced by recommendations from the Freight Stakeholders Task Force. Its purpose is to identify current connections between highway, aviation, transit, rail, water, and bicycle/pedestrian systems and to determine if deficiencies exist.

5-4 REFERENCES

1. U.S. Department of Transportation, Federal Highway Administration, October 30, 1987. Guidance for Preparing and Processing Environmental and Section 4(f) Documents, FHWA Technical Advisory T6640.8A

2. Council on Environmental Quality, Executive Office of the President, 1978. Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act. Reprint 43 FR 55978-56007, 40 CFR Parts 1500-1508.

3. Federal Register, August 28, 1987 Environmental Impact and Related Procedures, FR Volume 52, No. 167.

4. Interposal Surface Transportation Efficiency Act (ISTEA) of 1991, Section 1034, Management and Monitoring Systems

5. FDOT, Topic No. 525-030-250, Development of the Florida Intrastate Highway System, September 15, 1998